Practice: 338 - Prescribed Burning Scenario: #1 - Understory Burn

# **Scenario Description:**

Applying a prescribed burn according to designed burn plan and NRCS Prescribed Burning (338) standard and specifications in order to control undesirable species, improve wildlife habitat, improve plant productivity and/or quality, facilitate grazing distribution, to encourage natural seeding or to permit reforestation by planting or direct seeding and maintain ecological processes. An Understory burn can consume debris or leaf litter under controlled conditions that otherwise could burn uncontrollably and devastatingly. Prior to burning unit may need to be treated to reduce slash height and quantities. Burn should be cool enough to not cause mortality to residual stand but also must reduce litter and debris. Burned firebreaks used to achieve total firebreak width are part of these burns. (Constructed firebreak cost is not included in cost of burn. Refer to Firebreak (394) standard and cost scenarios)

## **Before Situation:**

Light slash accumulation in a open forest stand. Leaf litter and debris throughout stand. Small seedlings of various quantities may be present. Desirable plant composition is lacking due to reduced plant vigor, invasive species or improper livestock distribution.

#### **After Situation:**

Litter, debris and slash are consumed, small seedlings may be killed during active burning. Residual larger trees have little to no scorching. Post treatment fire danger is significantly reduced. Desirable plant composition is restored, plant vigor improved and invasive species reduced. Forage production and quality for livestock and /or wildlife is improved.

Scenario Feature Measure: Acres planned

Scenario Unit: Acre

Scenario Typical Size: 15

Scenario Cost: \$7,283.23 Scenario Cost/Unit: \$485.55

Cost Details (by category):				Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$36.81	8	\$294.48
Trailer, water tank	1598	Mobile 5,000 gal water tank mounted on a trailer. Equipment only. Does not include towing equipment.	Hour	\$19.83	8	\$158.64
Water tank, portable	1602	Portable water tank transported in a pick up truck. Typically with 200 gallon capacity includes tank with pump, hose and sprayer. Does not include the pickup truck. Equipment only.	Hour	\$2.56	8	\$20.48
Labor						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc	Hour	\$40.66	16	\$650.56
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$24.74	40	\$989.60
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$42.58	8	\$340.64
Specialist Labor	235	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$105.41	44	\$4,638.04
Materials						
Fuel, ignition fuel mixture	1596	Mixture of gasoline and diesel for ignition of prescribed burns. Materials only.	Gallon	\$3.82	5	\$19.10
Mobilization						
Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$171.69	1	\$171.69

Practice: 338 - Prescribed Burning

Scenario: #3 - Steep Terrain, Volatile fuels >4 ft tall, <10% Canopy Cover

### **Scenario Description:**

Applying a prescribed burn according to designed burn plan and NRCS Prescribed Burning (338) standard and specifications in order to control undesirable species, improve wildlife habitat, improve plant productivity and/or quality, and maintain ecological processes. This scenario is based on a burn area of 15 acres and applies under the following conditions: where the terrain of the majority of the area to be burned >15% slopes with herbaceous and low volatile woody fuel with high volatile woody fuels greater than 4ft tall, but fire is still a ground fire carried by fine fuel. Burned firebreaks used to achieve total firebreak width are part of these burns. (Constructed firebreak cost is not included in cost of burn. Refer to Firebreak (394) standard and cost scenarios)

### **Before Situation:**

Desirable plant composition is lacking due to reduced plant vigor, invasive species or improper livestock distribution.

### **After Situation:**

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Desirable plant composition is restored, plant vigor improved and invasive species reduced. Forage production and quality for livestock and /or wildlife is improved.

Scenario Feature Measure: Acres Planned

Scenario Unit: Acre

Scenario Typical Size: 15

Scenario Cost: \$8,390.03 Scenario Cost/Unit: \$559.34

Cost Details (by catego Component Name	• -	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation				(5) (1111)		
Water tank, portable		Portable water tank transported in a pick up truck. Typically with 200 gallon capacity includes tank with pump, hose and sprayer. Does not include the pickup truck. Equipment only.	Hour	\$2.56	8	\$20.48
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$36.81	8	\$294.48
Trailer, water tank		Mobile 5,000 gal water tank mounted on a trailer. Equipment only. Does not include towing equipment.	Hour	\$19.83	8	\$158.64
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$30.40	16	\$486.40
Labor						
Skilled Labor		Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc	Hour	\$40.66	16	\$650.56
General Labor		Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$24.74	56	\$1,385.44
Supervisor or Manager		Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$42.58	8	\$340.64
Specialist Labor		Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$105.41	44	\$4,638.04
Materials					•	
Fuel, ignition fuel mixture		Mixture of gasoline and diesel for ignition of prescribed burns. Materials only.	Gallon	\$3.82	5	\$19.10
Mobilization						
Mobilization, very small equipment		Equipment that is small enough to be transported by a pick- up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously.	Each	\$70.49	2	\$140.98
Mobilization, medium	1139	Equipment with 70-150 HP or typical weights between	Each	\$255.27	1	\$255.27

14,000 and 30,000 pounds.

Practice: 338 - Prescribed Burning Scenario: #4 - Volatile Fule Burn

# **Scenario Description:**

Applying a prescribed burn according to designed burn plan and NRCS Prescribed Burning (338) standard and specifications in order to control undesirable species, improve wildlife habitat, improve plant productivity and/or quality, facilitate grazing distribution, to encourage natural seeding or to permit reforestation by planting or direct seeding and maintain ecological processes. An Understory burn can consume debris or leaf litter under controlled conditions that otherwise could burn uncontrollably and devastatingly. Prior to burning unit may need to be treated to reduce slash height and quantities. Burn should be cool enough to not cause mortality to residual stand but also must reduce litter and debris. Burned firebreaks used to achieve total firebreak width are part of these burns. (Constructed firebreak cost is not included in cost of burn. Refer to Firebreak (394) standard and cost scenarios)

### **Before Situation:**

Heavy shrub accumulation with a a high volatility. Leaf litter and debris throughout stand. Small seedlings of various quantities may be present. Desirable plant composition is lacking due to reduced plant vigor or invasive species.

#### **After Situation:**

Shrubs, litter, and debris are consumed, small seedlings may be killed during active burning. Residual larger trees have little to no scorching. Post treatment fire danger is significantly reduced. Desirable plant composition is restored, plant vigor improved and invasive species reduced.

Scenario Feature Measure: Acres Planned

Scenario Unit: Acre

Scenario Typical Size: 15

Scenario Cost: \$8,169.54 Scenario Cost/Unit: \$544.64

Cost Details (by catego	• •			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$36.81	20	\$736.20
Trailer, water tank		Mobile 5,000 gal water tank mounted on a trailer. Equipment only. Does not include towing equipment.	Hour	\$19.83	20	\$396.60
Water tank, portable		Portable water tank transported in a pick up truck. Typically with 200 gallon capacity includes tank with pump, hose and sprayer. Does not include the pickup truck. Equipment only.	Hour	\$2.56	20	\$51.20
Labor						
Specialist Labor		Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$105.41	10	\$1,054.10
Skilled Labor		Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc	Hour	\$40.66	144	\$5,855.04
Materials			•	•	•	•
Fuel, ignition fuel mixture		Mixture of gasoline and diesel for ignition of prescribed burns. Materials only.	Gallon	\$3.82	20	\$76.40